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APPLICATION NO 750 FILING 5 ATTOMNET 96 MADNITUSK NAMED INVENTOR S ATTOMNET 105 CET NO.

LM11/1211

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ART권체유3 PAPER NUMBER,

12/18/97

DATE MAILED:

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

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Office Action Summary

Application No. **08/657,750**

Applicant(s)

Madnick et al.

Examiner

John Harrity

Group Art Unit 2783



| X Responsive to communication(s) filed on Nov 3, 1997 | · |
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| ☐ This action is FINAL . | |
| ☐ Since this application is in condition for allowance except in accordance with the practice under <i>Ex parte Quayle</i> , | |
| A shortened statutory period for response to this action is s is longer, from the mailing date of this communication. Fail application to become abandoned. (35 U.S.C. § 133). Extend 37 CFR 1.136(a). | month(s), or thirty days, whichever ure to respond within the period for response will cause the ensions of time may be obtained under the provisions of |
| Disposition of Claims | |
| | is/are pending in the application. |
| Of the above, claim(s) | is/are withdrawn from consideration. |
| Claim(s) | is/are allowed. |
| | is/are rejected. |
| Claim(s) | |
| ☐ Claims | are subject to restriction or election requirement. |
| Application Papers See the attached Notice of Draftsperson's Patent Draft The drawing(s) filed on | r. rity under 35 U.S.C. § 119(a)-(d). es of the priority documents have been Number) the International Bureau (PCT Rule 17.2(a)). |
| Attachment(s) Notice of References Cited, PTO-892 Information Disclosure Statement(s), PTO-1449, Pape Interview Summary, PTO-413 Notice of Draftsperson's Patent Drawing Review, PTO Notice of Informal Patent Application, PTO-152 | |
| SEE OFFICE ACTION O | ON THE FOLLOWING PAGES |



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- 1. Claims 1 38 are presented for examination.
- 2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(f) or (g) prior art under 35 U.S.C. 103(a).

- 3. Claims 1 38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Adair et al., patent no. 5,416,917, alone or in view of Cohen et al., patent no. 5,590,319.
- 4. As to claims 1 and 14, Adair et al. disclosed a system comprising a request translator for translating into a second data context (267, Fig. 5; col. 13, line 33, et seq.), and a data translator for translating received data into the data context associated with the request (279, Fig. 5; col. 13, line 52, et seq.). Adair et al. did not specifically disclose the request translator



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translating a request into a query. It would have been obvious to one of ordinary skill in the art at the time of Applicant's invention that the translation in Adair et al. would result in a query, because it is through a query that the serving machine accesses the desired data from the database (see, for example, col. 18, line 9, et seq.). In the alternative, Cohen et al. disclosed the translation of a request into a query (col. 12, line 52, et seq.). It would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to include Cohen et al.'s query generation into the Adair et al. system, because such is necessary for the accessing of the data from the database of Adair et al. As to claims 2, 15, and 27, Adair et al. disclosed the request being received by the request translator (see 265, Fig. 5). As to claims 3, 16, and 28, Adair et al. disclosed generation of the request (including, inter alia, 260, Fig. 5). As to claims 4, 5, 17, 18, 29, and 30, Adair et al. did not specifically disclose the request translator determining at least one heterogeneous data source. Cohen et al. disclosed the determining from the request (or ontology) the at least one heterogeneous data source (col. 13, line 64, et seq. and col. 3, lines 37 - 53). It would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to include Cohen et al.'s determination step and parallel database engines into the Adair et al. system, because such would increase the throughput of the Adair et al. system by allowing for parallel processing of the database request. As to claims 6, 19, and 31, Adair et al. disclosed the detection of a difference in context (col. 4, line 61, et seq.). As to claims 7, 20, and 32, Adair et al. disclosed the conversion being accomplished by a pre-defined function (this would relate to the conversion process - col. 13, line 33, et seq.). As to claims 8, 10, 21, 33, and 35, Adair et al. did not specifically disclose





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optimizing the query. It would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to include query optimization into the Adair et al. system, because such would increase the throughput of the Adair et al. system by inherently allowing for faster processing of query. As to claims 9, 22, and 34, Official notice is taken that the query is transmitted to the heterogeneous data source in Adair et al. As to claims 11, 12, 23, 24, 36, and 37, Adair et al. did not specifically disclose the query being separated into sub-queries which are transmitted to different data sources. Cohen et al. disclosed the query being separated into subqueries which are transmitted to different data sources (col. 10, line 45, et seq. and col. 13, line 64, et seq.). It would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to include Cohen et al.'s query splitter and parallel database engines into the Adair et al. system, because such would increase the throughput of the Adair et al. system by allowing for parallel processing of the database request. As to claims 13, 25, and 38, Adair et al. disclosed the conversion by the data translator being performed by a pre-defined function (this would relate to the conversion process - 279, Fig. 5). As to claim 26, Adair et al. did not specifically disclose the translators being computer-readable program means. It would have been obvious to one of ordinary skill in the art at the time of Applicant's invention that the translators of Adair et al. could have been implemented in either hardware or software, as is well known in the art.

5. Any response to this action should be mailed to:



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Commissioner of Patents and Trademarks Washington, D.C. 20231

or faxed to:

(703) 308-9051, (for formal communications intended for entry)

Or:

(703) 308-5358 (for informal or draft communications, please label "PROPOSED" or "DRAFT")

Hand-delivered responses should be brought to Crystal Park II, 2021 Crystal Drive, Arlington. VA., Sixth Floor (Receptionist).

6. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to John Harrity whose telephone number is (703)305-9596.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703)305-3900.

A shortened statutory period for response to this action is set to expire 3 (three) months and 0 (zero) days from the date of this letter. Failure to respond within the period for response will cause the application to become abandoned (see MPEP 710.02, 710.02(b)).

JOHN E. HARRITY/ PATENT EXAMINER GROUP 2300

December 6, 1997